## ACC NR. AM5027749

Problems of investigating the troposphere by means of refractometers, the mean level of signals, meteorological conditions and topography, fluctuation of arrival angles and distortions of antennatopography, fluctuation of arrival angles and distortions of antennal directivity patterns, losses in antenna gain, and quick and slow fadings of signal levels are discussed. The statistical characteristics of the signals at diversity reception in time, space, frequency and angle as well as the distortion of signals in the communication systems are also investigated. The long-distance propagation is analyzed, and the engineering method of calculating field intensity at long-distance tropospheric propagation is given. At present, there is no theory of Long-Distance Tropospheric Propagatintensity at long-distance tropospheric propagation is given. At present, there is no theory of Long-Distance Tropospheric Propagation which can be applied effectively enough in practice. Thus, in the investigation of that propagation, considerable attention has to be paid to experiments. The special characteristics of geographical conditions of the territory involved should be taken into consideration during the analysis of experimental data and in their practical application because the conditions of propagation in practical application because the conditions of propagation in arctic and tropical climates differ from those existing over seas and continents. A considerable part of the monograph deals with the investigation of long-distance tropospheric propagation carried out over dry land routes, 800 km long, in the central part of the USSR under the general supervision of B. A. Vvedenskiy and A. G.

Aremberg (up to 1957). V. I. Siforov investigated problems con-

nected with distortions and fluctuations of signals. References follow each chapter.

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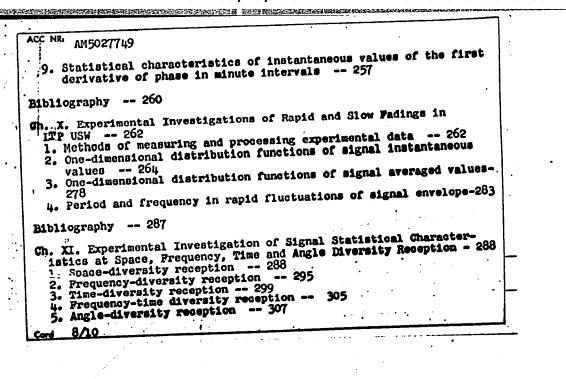
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SOV/120-59-2-16/50

AUTHORS: Kilin, S.F., Prosin, G.P., and Rozman, I.M.

TITLE: A Multi-frequency Phase Fluorometer with Double

Frequency-Changing (Mnogochastotnyy fazovyy fluorometr

s dvoynym preobrazovaniyem chastoty)

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 2, pp 57-59

(USSR)

ABSTRACT: Much progress has recently been made in fluorometry

directed to fast processes. Sensitivities of 2x10-11 sec have been attained (Ref 1), which are not accessible with

pulse techniques applied to photomultipliers and oscilloscopes. Phase fluorometers measure the fluorescence time  $\Upsilon_f$ , which is defined by

 $\omega \tau_f \equiv tg \varphi = \int_{c}^{\infty} R(t) \sin \omega t \, dt / \int_{c}^{\infty} R(t) \cos \omega t \, dt,$ 

where  $\phi$  is the phase shift between the emitted and exciting fluxes,  $\omega$  is the modulation frequency, and R(t) is the fluorescence decay law. In general,  $\tau_f$  is a function of  $\omega$ ; only if the decay is exponential law is  $\tau_f$  independent of frequency and the same as the mean life of the fluorescence  $\tau$ . The decay law cannot be established unambiguously by measuring  $\tau_f$  at different

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A Multi-Frequency Phase Fluorometer with Double Frequency-Changing

frequencies (Ref 2), but such measurements can be used to determine whether the decay is exponential, and to test Strictly speaking, only any proposed decay law. unperturbed molecules fluoresce exponentially. Quenching agents cause the decay to deviate from exponential Bimolecular quenching occurs when the (Refs 3.5). emission is excited by ionizing radiation with a heavy ionization density; the decay law is then much affected Scintillations excited in this way show an (Refs 6,7). initial sharp peak, which passes gradually into an If primary photons play a major part exponential decay. in the scintiliation (Ref 8), the photon cascades these primaries produce must give a decay curve that shows an initial rising section. Attempts to establish the decay curve for anthracene have given entirely contradictory If the modulation frequency is not results (Refs 9,10). too low, i.e. if  $\sin \omega t$  (or  $\cos \omega t$ ) has time to change appreciably during the mean decay time, tm, Tf is sensitive to the shape of the decay curve, and the shape of the  $v_f(\omega)$  spectrum may be used to indicate roughly the form of the decay curve. The phasemeter system

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SOV/120-59-2-16/50 · A Multi-Frequency Phase Fluorometer with Double Frequency-Changing described previously (Ref 11) has been extended by adding units to perform phase measurements at 8, 12, 15 and 20 Mc/s. Fig 1 shows the block diagram. The mixer, 1, receives frequencies f1 and f2 from a quartz oscillator and from a GSS-6 signal generator. A resonant circuit selects the beat frequency F1 = f1 - f2 and feeds it to an electron-beam modulator. The mixer, 2, receives the frequency F1 from the photomultiplier (which detects the fluorescence), and  $f_2$  from the GSS-6. A resonant circuit selects the frequency  $F_2 = F_1 + f_2 = f_1$ . Thus the double frequency-changing enables one to make phase measurements at a fixed frequency of 20 Mc/s, whereas the beam is modulated at frequency F1. Now  $F_1$  differs greatly from  $f_1$  and  $f_2$ , and so the various frequencies can be separated very thoroughly by the filters. The frequency f1 (20 Mc/s) is stable (quartz oscillator), so the main causes of phase drift are frequency instability in the GSS-6 and instabilities in the resonant circuits, in the electron beam, and in the photomultiplier (an FEU-25). Under the most unfavourable Card 3**/**6 conditions, with  $F_1 < f_2$  (modulation frequency 8 Mc/s),

SOV/120-59-2-16/50

. A Multi-Frequency Phase Fluorometer with Double Frequency-Changing when  $\Delta f_2/F_1 > \Delta f_2/f_2$  the zero drift is about 0.50/min. An 8-position sample-holder is used to change the sample and check the zero reading quickly. Numerous measurements made with the instrument indicate that the rootmean-square error is about 10. Fig 2 gives some results for plastic phosphors, (Ref 12). The fluorescent additives were excited by the light produced in a separate polystyrene disc ( $\lambda = 310 \text{ m}\mu$ ), which was excited by a modulated beam of 30 kV electrons. The plastic phosphors containing tetraphenylbutadiene and triphenylpyrazoline showed no dependence of  $\gamma_f$  on frequency, within the experimental error. Calculations show that  $\gamma_f$  should fall uniformly with frequency if the decay consists of two components, both exponential but with different values of  $\tau$ . The anthracene content of  $10^{-2}$  g/g (Fig 2, curve 3), gives  $\tau_1 = 2.7 \times 10^{-9}$  sec and  $\tau_2 = 16 \times 10^{-9}$  sec. Anthracene in benzene gives the same value of \$\mathbf{t}\_1\$, (Ref 13);  $\gamma_2$  relates to anthracene bound to polystyrene, (Ref 14). The phase difference between the modulated electron beam and the fluorescence has to be measured in Card 4/6 this method; the two signals are of different physical

SOV/120-59-2-16/50 A Multi-Frequency Phase Fluorometer with Double Frequency-Changing There are several ways of making the measurement (Refs 11, 15). If we use several different frequencies to measure the phase difference between two different values of T, we can draw up enough equations to determine  $au_1$ , and  $au_2$ , and to eliminate the unknown initial phase of Measurements made with several pairs the electron beam. of phosphors show that it is impossible to get agreement between the values of  $\tau_1$  and  $\tau_2$  for all combinations of the frequencies (any two frequencies suffice to give  $\tau_1$ Hence the and  $\tau_2$ , so the number of combinations is 6). The results for decay laws are not exponential. polystyrene (which is the basis of the most plastic phosphors) can be explained if we suppose that some of the excited molecules interact with one another, i.e. We would get the that bimolecular processes occur. reverse dependence of  $\gamma_f$  on frequency if we were to assume primary photons present. Some more detailed aspects of this topic will form the subject of a separate paper. This is a complete translation apart from Fig 1.

Card 5/6 There are 2 figures and 15 references, of which

SOV/120-59-2-16/50

A Multi-Frequency Phase Fluorometer with Double Frequency-Changing

3 are German, 4 are English, 7 are Soviet and 1 is
translated from English.

Fig 2 captions are: Relation of 7 to modulation
frequency for various phosphors. 1) tetraphenyl
butadiene in polystyrene, 3x10-4 g/g; 2) triphenylpyrazoline in polystyrene, 2x10-2 g/g; 3) anthracene in
polystyrene, 10-2 g/g.

SUBMITTED: February 13, 1958

<u>E 45163-66</u> EWT(d)/EWP(1) IJP(c) BB/GG ACC NR: AP6027521 (A) SOURCE CODE: UR/0317/66/000/005/0036/0039

AUTHOR: Tenen, D., (Colonel); Prosin, N., (Colonel)

26 B

ORG: none

TITLE: Training equipment \6

SOURCE: Tekhnika i vooruzheniye, no. 5, 1966, 36-39

TOPIC TAGS: training equipment, logic circuit, military training

ABSTRACT: A description and specifications are given of a trainer designed for both group and individual training of military personnel in subjects programmed beforehand. The trainer is a set of electromechanical and radio engineering logic circuits providing simultaneous control of the rate at which the material is mastered. The trainer operates under four regimes: group training with an instructor, group training without an instructor, group and individual control, and, finally, individual training. A block diagram, circuits, and an overall view of the device are given in the original article.

SUB CODE: 09/ SUBM DATE: none/

Card 1/1 augur

ESTATOVA, Ye.T.; PROSIN, P.I.

Revision of wage rates at the Omsk Petroleum Refinery. Meftianik 3 no.5:28-29 My '58. (MIRA 11:9)

Starshiy inzh. TSentral'nogo byuro normativov truda (for Estatova)
 Nachal'nik otdela truda i zarplaty Omskogo neftepererabatyvayushchego zavoda (for Prosin).
 (Omsk--Petroleum refineries) (Wages)

#### CIA-RDP86-00513R001343310007-9 "APPROVED FOR RELEASE: 09/19/2001

PRITIN P. I.

92-58-5-25/30

AUTHORS:

Estatore, Ye. T., Senior Engineer, and Prosin, P. I., Head of the

Personnel and Pay Department of the Unit Refficery

TITE:

Tentative Revision of Workmen's Wages at the Quak Refinery (Oppt perestroyki zarabotnoy platy rebochikh na Onskou neftspererebety-

variabeban zavođe)

PERIODICAL: Mestyanik, 1958, Nr. 5, pp 28-29 (USER)

ABSTRACE:

The Omsk refinery has tentatively adopted a new method of remunerating its workmen. The author states that this is in line with measures taken in connection with the proposed revision of wage scales and of technical essignment regulations. The new wage achedule, shown by the author in table 1, provides a scale containing 8 categories. As compared with the previous wage scale, the refinery rates were raised on the average by 38 percent. The new rates and the old ones are indicated by the author in table 2. The wage increase made it possible to reclassify jobs and to widen the scope of workness specialization. The incentive newerd system has elso been revised. Piece-rate pay been left unchanged for a certain category of jobs. For some jobs

Card 1/2

52-58-5-26/30

Tentative Revision of Workmen's (Cont.)

temporary piece-rate scale has been introduced. Thanks to the joint efforts of workmen, management and supervisors, the organization of work improved and it became possible to fulfill 127 percent of the work assigned by the plan. The contract-bonus rate scale has been raised by 3-6 percent and it has been decided that the highest bonus of an individual workmen should not exceed 40 percent of his regular pay. In table 3 the arthor shous the amount of monthly pay received on the basis of the revised scale by operators of thermal cracking units, atmospheric-vacuum pipe stills, and by machanics of different categories. The introduction of the new pay scale for workmen reised the productivity of leb....
However, where are still numerous problems relating to the remneration of workmen hich have not yet been solved. There are 3 tables.

ASSOCIATION:

Regulations); Otdel trude i sarglaty Guskogo MFZ (Personnel and Fay Department of the Gusk Refinery)

1. Petrologa industry-USSR 2. Personnel-Compensation

Card 2/2

L\_9882-66 EWP(e)/EWT(m)/EWP(b) ACC NR: AP6003965 44,55 UR/0089/65/019/003/0311/0312 SOURCE CODE: AUTHOR: Bochvar. I. A.; Keirim-Markus, I. B.; Moiseyev, A. Prosina. Yakubik, V. ORG: none TITIE: Measurement of the background external radiation exposure of the urban population in the USSR SOURCE: Atomnaya energiya, v. 19, no. 3, 1965, 311-312 TOPI: TAGS: radiation dosimeter, gamma irradiation, radioactive contamination, man ABSTRACT: Preliminary results are presented of the measurement of the background external exposure of small groups of people from 26 cities in the USSR. The studies were started in the second half of 1963. Individual dosimeters of the infrared spectroscopic type using thermoluminescent aluminophosphate glass were employed, allowing gamma doses from 0.02 to 2 X 10<sup>5</sup> rads to be measured. Ten people from each city wore the dosimeters continually for 167 to 325 days. The drop in instrument readings during the time of exposure was measured for control dosimeters. A table of results and error limits is given. Analysis of the data showed that the exposure levels depend largely on the type of rocks and soils in the cities; attempts to observe a correlation between exposure dose and latitude or height above sea level were unsuccesful. Orig. art. has: 1 table. [NA7] SUB CODE: / SUBM DATE: OLApr65 / ORIG REF: OO2 / OTH REF: OO4 <u>Card</u> 1/1 UDC: 539.16.04

POCHVAR, I.A.; KEIRIM-MARKUS, I.B.; MOISEYEV, A.A.; PROSINA, T.I.;
YAKUBIK, V.V.

Measuring the exposure of town inhabitants in the U.S.S.R. to background radiation. Atom. energ. 19 no.32311-312 S '65.

(MIRA 18:9)

ACCESSION NR: AP4034803

S/0293/64/002/002/0304/0306

AUTHOR: Bochvar, I. A.; Vasil'yeva, A. A.; Keirim-Harkus, I. B.; Prosina, T. I.; Sergeyeva, N. A.; Uspenskiy, L. N.

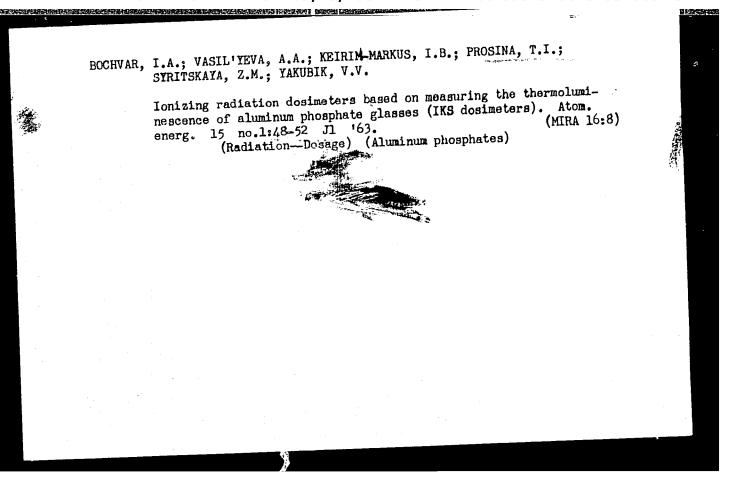
TITLE: Tissue dose of cosmic radiation received by V. F. Bykovskiy and V. V. Tereshkova during tandem orbital flight

SOURCE: Kosmicheskiye issledovaniya, v. 2. no. 2, 1964, 304-306

TOPIC TAGS: tandem flight, Vostok 5, Vostok 6, cosmic radiation,

ABSTRACT: Dosimetric readings taken during tandem orbital flights of the Vostok-5 (Bykovskiy) and the Vostok-6 (Tereshkova) show that the cosmic radiation doses absorbed by cosmonauts were 80 ±5 mrad and 44 ±5 mrad, respectively. Comparison of the above figures with measurements taken during preceeding flights show that the average intensity of the absorbed radiation was 0.65 mrad x hr-1 or 16 mrad x 24 hr-1. The estimates of absorbed doses of thermal neutrons were (1115).10- and (7 ±15)·10-4 rem for the Vostok-5 and the Vostok-6, respectively. Therefor the respective fluxes of thermal neutrons were (1 ±16)·105 and Card 1/2

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(8 ± 16) · 1 respective capsules values values v	0 <sup>5</sup> cm <sup>2</sup> whi ly. The i	le their de radiation le cimately 2—	nsities were 0.2 24 amount on the outer skings times higher than in	nd 3 17 cm - sec n of the space nside the space	
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PROSINA, Z.

Machinery--Construction

Young machine builders, Tekh. molod. no. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, March 1952. UNCLASSIFIED.

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1. Z Kliniki Chorob Nerwowych AM w Lodzi Kierownik: prof. dr nauk med. E. Herman.

(ACRODERMATITIS case reports)
(NEUROLOGICAL MANIFESTATIONS)

Economic results of panolux, improved leather. p.153.
PRZEGIAD SKURZANY (Centralne Zarzady Przemyslu Carbarskiego, Oblumniczego i Artykulow Skorzanych) Lodz. Vol. 10, no. 7, July 1955.

So. East European Accessions List Vol. 5, No. 9 September 1956

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The influence of moisture upon the yield of products from the destructive distillation

p. 15 (Prace) Voll 3, no. 4, 1957, Poznan, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

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Tars and oils obtained in xylite thermolysis as wood protection agents. Koks 9 no. 1:30-33 Ja-F 164.

1. Department of Chemical Technology of Timber, College of Agriculture, Poznan.

PROSINSKI, Stanislaw; ADANSKI, Zefiryn; SKIBA, Stanislaw

Possibilities of utilizing wood waste in order to obtain lignin construction material. Roczniki wyz szkola rol Poznan 16: 79-90 '63.

1. Department of Chemical Technology of Wood, College of Agriculture, Poznan.

PROSINSKI, Stanislaw; CZECHOWSKI, Zdzislaw; HULISZ, Stanislaw

Allyl alcohol occurring in some fractions of distillate obtained in hardwood pyrolysis. Roczniki wyz szkola rol Poznan 16: 125-133 '63.

1. Department of Chemical Technology of Wood, College of Agriculture, Poznan.

PROSINSKI, Stanislaw; CZECHOWSKI, Zdzielaw; HULISZ, Janina; HULISZ, Stanislaw

Studies on the possibility of using certain products obtained in the thermolysis of coniferous wood for solubilisation of naphthalene in gas pipes. Koks 7 no.6:242-243 N-D 162.

l. Katedra Chemicznej Technologii Drewna, Wyzsza Szkola Rolnicza, Poznan, i Fabryka Rozkladowej Destylacji Drewna, Gryfino.

STHNISH 4W,

POLAND/Chemical Technology - Chemical Products and Their

Application. Wood Chemistry Products. Hydrolysis I-9

Industry.

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2657

Author : Prosinski Stanislaw, Giecewicz Tadeusz

Inst : Institute of Wood Technology

Title : Effect of Moisture Content of Wood on the Yield of Products

of Thermal Decomposition

Orig Pub : Prace Inst. technol. drewna, 1957, 3, No 4, 15-33

Abstract : With increasing moisture content of the wood an increase

takes place in the yield of aqueous distillate, and to a lesser extent in that of acids, CHqOH and charcoal.

Increased moisture content has a detrimental effect on the yield of uncondensable gases and tar. It is shown that op-

timal moisture content of wood that is subjected to distil-

Card 1/1

lation is 12-18%.

PROSINSKI, Stanislaw; PRZYBYLAK, Antoni

From research works on the extract obtained from stimp wood of the green Scotch pine (Pinus Silvestris L.) Pt. 1.
Attempts to obtain fraction of resin acids. Sylvan 106 no.3: 1-9 '62.

1. Zaklad Chemicznej Technologii Drewna Instytutu Technologii Drewna i Katedra Chemiczna Technologii Drewna, Wyzsza Szkola Rolnicza, Poznan.

POL/ND/Chemical Technology. Chemical Products and Their Applications. Corrosion. Corrosion Control.

Abs Jour: Ref Zhur-Khimiya, No 7, 1959, 23734

Author : Prosinski, S., Giecewiczowa, P.

Title: Investigation of Corrosive Action of Products Derived from the Destructive Distillation of Wood on Certain Metals.

Orig Pub: Prace Inst. technol. drewna, 1958, 4, No 2,

Abstract: Corrosion resistances of Cu, of acid-resistant steel and of 98 percent purity Al with respect to raw liquor, to extract (4.6 percent CH3COOH), black acid (57 percent

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POLIND/Chemical Technology. Chemical Products and Their Applications. Corrosion. Corrosion Control.

H-4:

Abs Jour : Ref Zhur-Khimiya, No 7, 1959, 23734

CH3COOH), to waste waters (3.4 percent CH3COOH) and to gaseous media was investigated. The obtained results indicate that:

1) Al possesses the greatest stability to black acid under operating conditions of the equipment involved (the decrease in weight in the liquid phase - 1.6 percent, and of the gaseous phase - 0.8 percent);
Cu is the next (decrease in weight when in the liquid phase - 1.1 percent, when in the gaseous phase - 12.5 percent); the acid-resistant steel is unstable under the above conditions. 2) In the raw liquor the most stable

Card : 2/4

POLAND/Chemical Technology. Chemical Products and Their Applications. Corrosion. Corrosion Control.

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Abs Jour: Ref Zhur-Khiniya, No 7, 1959, 23734

material is the acid resistant steel (decrease in weight when in the vapor phase was not detected); the least resistant is Al. 3) In the waste water, the acid resistant steel is the most stable material (the decrease in weight, when in the liquid phase is 0.0 percent, in the vapor phase it is 3.3 percent); Cu is the next (the decreases in weight are 0.0 percent and 3.2 percent in liquid and vapor phases respectively). The resistance of Al is less than those of steel and copper. 4) As for the extract (experiment of 600 hour duration), the

Card : 3/4

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H-4

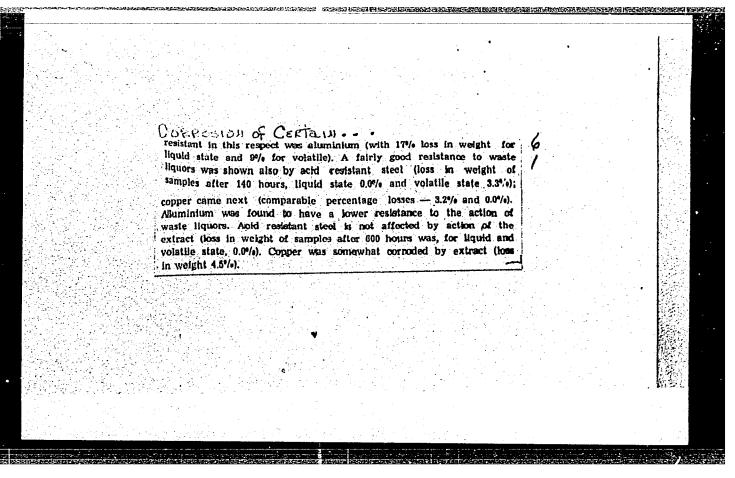
POLAND/Chemical Technology. Chemical Products and Their Applications. Corrosion. Corrosion Control.

Abs Jour: Ref Zhur-Khimiya, No 7, 1959, 23734

acid-resistant steel is stable in either liquid or vapor phases. The decrease in the weight of Cu is 4.5 percent. -- F. Slonyanskaya

Card : 4/4

ROS1.115X1 822.712;620.191.2 5767 Prosiński S., Giecewiczowa P. Currasian of Metals by ducts of Destructive Wood Distillation. "Badania nad korozją niektórych metali przez produkty rozkładowe destylacji drawna", (Prace Inst. Technol, Drawna. No. 2), Poznań, 1958, PWN, 13 pp., 9 14gs., 12 tabs. Investigations were undertaken to study the effect of certain derivatives of destructive wood-distillation on certain metals, and to ascertain which metals are most suitable for manufacture of parts of industrial apparatus. An examination was made of the effect on Polish made copper Mil Polish a 11 (KNR), acid-resistant steel, and aluminium (95% of pure Al content) of the following products: 1) raw mixture; 2) extract (4.6% of vinegar soid content; 3) black acid (57% of vinegar acid content); 4) waste liquors (0.4% of vinegar acid content). Tests were carried out under conditions resembling those in industry. The investigations resulted in the following order of sulfability of the three metals for apparatus intended to be kept in contact with black acid: aluminium - average loss in weight of samples after 140 hours, liquid state 1.6% and votatile state 0.8%; copper - comparable doss in weight 1.1% and 12.5%; steel, acid resistant - lowest resistance to black acid, average loss in weight, respectively 45.6% and 70.3%. Steel showed, on the other hand, relatively good resistance to raw mixture (loss in weight of samples after 140 hours was 0.0% for liquid and volatile state alike); least



PROSINSKI, Stanislaw; CZECHOWSKI, Zdzislaw

Separation of pyrocatechin from the phenol fraction of leaf wood tar by means of butyl acetate. Koks smola gaz 6 no.6:215-218 '61.

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PROSINSKI, Stanislaw; CICHOWICZ, Zofia; PAPRZYCKI, Oswald

Surface treatment of porous fiberboard to protect it from moisture. Roczniki wyz szkola rol Poznan 16:101-123 '63.

1. Department of Chemical Technology of Wood, College of Agriculture, Poznan.

PROSINSKI, Stanislaw; ADAMSKI, Zefiryn; BABICKI, Ryszard; GRZECZYNSKI, Tadeusz

Chemical composition and some physical and mechanical properties of poplar wood from a plantation irrigated by town sewage. Roczniki wyz szkola rol Poznan 16:91-100 163.

 Department of Chemical Technology of Wood, College of Agriculture, Poznan.

PROSINSKI, Stanislaw; ADAMSKI, Zefiryn

Studies on beechwood digestion in hydrotropic solutions. Roczniki wyz szkola rol Poznan 16: 67-77 '63.

1. Department of Chemical Technology of Wood, College of Agriculture, Poznan.

PROSINSKI, Stanislaw; SURMINSKI, Janusz; HAUFA, Barbara

Chemical composition of narrow-leaved reed (Typha angustifolia) and experiments in obtaining cellulose pulp from it. Roczniki wyz szkola rol Poznan 16: 135-139 163.

 Department of Chemical Technology of Wood, College of Agriculture, Poznan.

## PROSINSKI, STANISLAU.

Nasycanie drewna sosnowego roztworem fluorku sodu.

Poznan Panstwowe Wydawn. Naukowe 1959. 56 p. Poland. (Poznanskie Towarzystwo Przyjaciol Nauk. Komisja Nauk Rolniczych i Lesnych. Prace, t.6, zesz. 2)

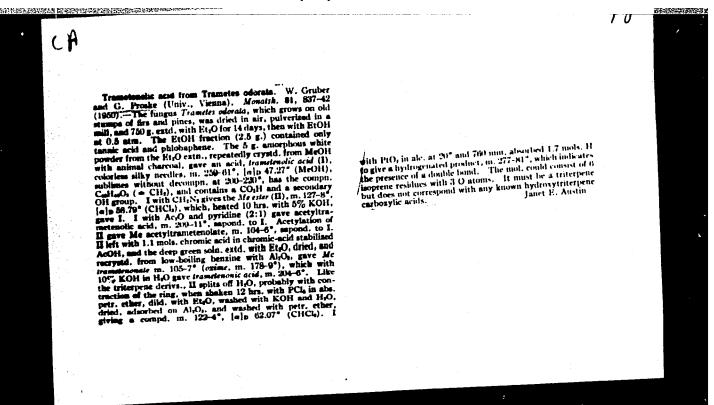
Monthly list of East European Accessions (EEAI) LC, Vol. 9, No. 2, Feb. 1960

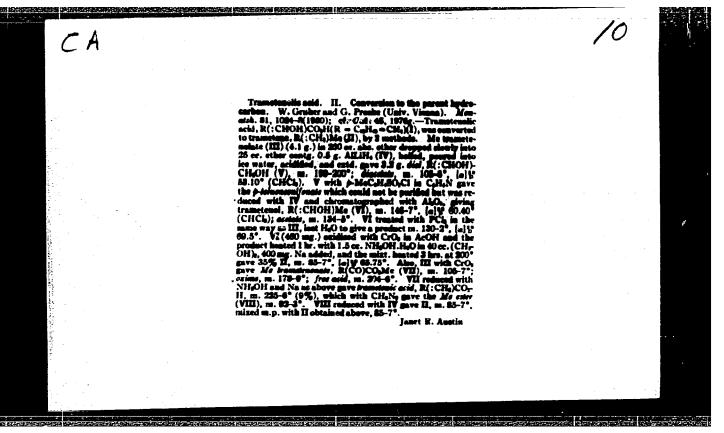
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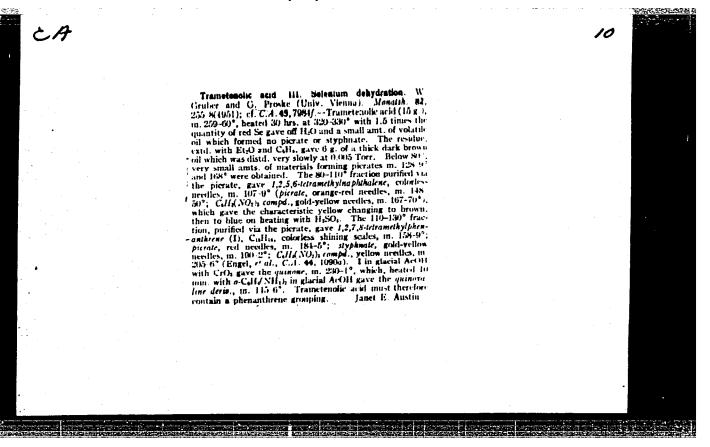
PROSINSKI, St.; BABICKI, R.

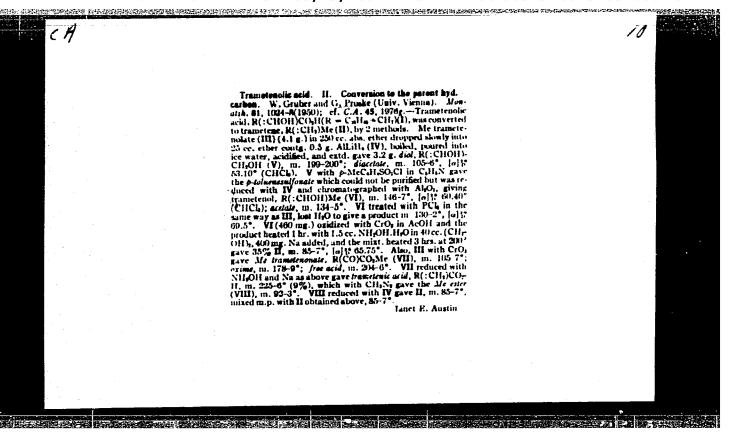
On a new method of cellulose determination by using diluted solutions of nitrogen and sodium hydroxide. Sylwan 104 no.1:95-99 Ja '60.

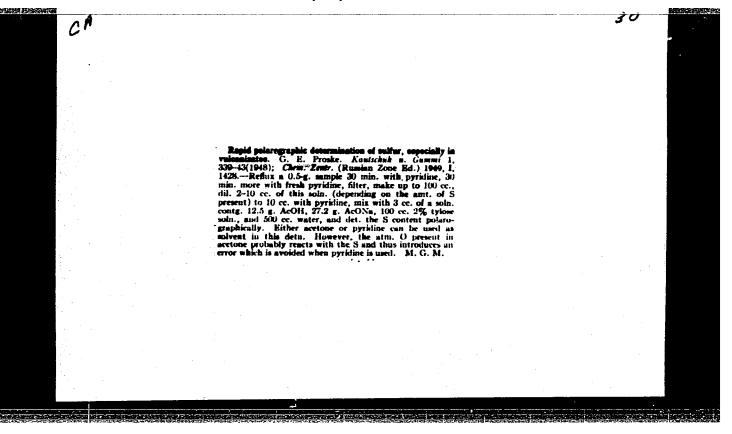
1. Zaklad Chemicznej Technologii Drewna, Instytut Technologii Drewna, Warszawa.











ABLOV, A.V.; D'YAKON, I.A.; IVAMOVA ". "..; PROSKIN., S.M.; CHAPURINA, I.F.

Medif; cation of copper respectfulate. Zhur. neorg. khim. 10 nc.3: 628-635 Mr 165. (MIRA 18:7)

1. Institut khimil All Maddershop SSR.

#### 30401

15.8180

**3/058/61/000/009/013/050** A001/A101

AUTHORS:

Ablov, A.V., Proskina, N.N.

TITLE:

Light absorption by polymer compounds

PERIODICAL: Referativnyy zhurnal. Fizika, no. 9, 1961, 90, abstract 9V108 ("Uch.

zap. Kishinevsk, un-t", 1960, v. 56, 17 - 23)

The authors studied absorption spectra in the visible and ultraviolet ranges of spectrum by coordination polymers of the following composition:  $Co(NH_3)_3$  (NO<sub>2</sub>), (I) and Co en (NH<sub>3</sub>) (NO<sub>2</sub>), (II). They show that in all cases studied the full additivity of absorption of colored ions is preserved. Absorption spectra of polymer compounds of both composition (I) and (II) differ from each other. Cobaltic hexanitrite salt ions ("geksanitrokobaltiat-ion") are very unstable in aqueous solutions, especially at pH-values >6.

[Abstracter's note: Complete translation]

Card 1/1

ABIOV, A.V.; PROSKINA, N.N.; CHAPURINA, L.F.

Infrared absorption spectra of the products of the addition of aromatic amines to cobalt, zinc, and cadmium halides. Zhur. neorg. khim. 10 no.6:1350-1354 Je 165.

(MIRA 18:6)

1. Institut khimii AN Moldavskoy SSR.

ABIOV, A.V.; PROSKINA, N.N.; SHAFRANSKIY, V.N.

Infrared absorption spectra of trans-dihydroxyimines of trivalent cobalt with sulfanilamides. Zhur. neorg. khim. 10 no.6:1355-1359 Je 165. (MIRA 18:6)

1. Institut khimii AN Moldavskoy SSR.

PROSKORYAKOV, Ye. I. Materialy k flore Turkmenistana Izvestiya Turkm.

PROSKORYAKOV, YE. I. Materialy k flore Turkmenistana Izvestiya Turkm.

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Proskoryakov, Ye. I. Materialy k flore Turkmenistana Izvestiya Turkmenistana Iz

ALIMDZHANOV, R.A.; BRONSHTEYN, TS.G.; PROSKORYAKOV, Ye.I., professor, doktor biologicheskikh nauk, otvetstvennyy redaktor; ZHURAVLEV, B.S. redaktor izdatel'stva; SHEPEL'KOV, A.T., tekhnicheskiy redaktor

[Invertebrates of Zeravshan Valley; a systematic catalog of species with an indication of the beneficial and injurious forms] Bespozvonochnye shivotnye Zeravshanskoi doliny; sistematicheskii perechentidov s ukazaniem poleznykh i vrednykh form. Tashkent, Izd-vo Akademii nauk UzSSR, 1956. 348 p. (MIRA 9:10) (Zeravshan Valley--Invertebrates)

PROSKORY KOV, Ye.I.; DZHAIALOV, A.S.

Biology of one of the Central Asiatic tulips. Trudy Bot. sada AN Uz.
SNR no.5:127-132 '56.

(NERA 10:2)

(Sasarkand Province—Tulips)

# PROSKOSHKIN, D.A

AID Nr. 982-11 4 June

DIFFUSION OF SILICON AND TITANIUM IN NIOBIUM (USSR)

Arzhanyy, P. M., R. M. Volkova, and D. A. Proskoshkin. IN: Akademiya nauk SSSR Institut metallurgii imeni A. A. Baykova, Trudy; no. 11, 1962, 78-82.

S/509/62/000/011/003/019

Solid-state diffusion of Si and Ti in Nb. primarily structure and composition of the phases formed in the process of diffusion, have been studied. Specimens of niobium, containing 98.9% Nb, 0.4% Ta, 0.15% Pb, 0.13% Fe, 0.08% N, 0.09% O, 0.01% Si, 0.14% C, and 10-5% B, were impregnated with silicon and titanium at temperatures of 900° to 1300°C. It was found that the diffusion layer formed at 900° to 1100°C consists of a single phase, a solid solution of titanium in NbSi<sub>2</sub>. This phase has the same hexagonal lattice as NbSi<sub>2</sub> but with parameters a = 4.779 and c = 6.493 kX; its microhardness is 1200 kg/mm<sup>2</sup>. Below this layer, at 1200°C and 1300°C, a second diffusion layer 5 to 6 \mu thick is formed which contains 82% Nb. Its structure could

Card 1/2

 AID Nr. 982-11 4 June

DIFFUSION OF SILICON [Cont'd]

s/509/62/000/011/003/019

not be determined. The total thickness of the diffusion layers depends on the temperature and duration of impregnation; e.g., in an impregnation lasting 6 hrs it varies between 21  $\mu$  at 900° and 210  $\mu$  at 1300°C. Titanium accelerates the diffusion of silicon in Nb. Oxidation tests at 1000, 1100, 1150, and 1200°C showed that for the first 20 to 100 hrs (depending on temperature) the oxidation follows a logarithmic rate. The oxidized surface is smooth. After 75 to 80 hrs at 1100°C or 18 to 20 hrs at 1200°C the oxidation rate increases sharply and the oxide layer turns spongy. However, no oxide peeling or Nb<sub>2</sub>O<sub>5</sub> emergence on the surface was observed. Generally, Si-Ti diffusion coating on Nb was found to have almost 50% higher oxidation resistance than Si coating. The oxide film was found to consist of a  $\beta$ -phase -- Nb<sub>2</sub>O<sub>5</sub>-- with lattice parameters a = 21.38, b = 3.79, and c = 20.12 kX and an  $\alpha$ -phase -- SiO<sub>2</sub> -- with parameters a = 5.02 and c = 8.22 kX. The surface of the film consists of rutile and  $\alpha$  SiO<sub>2</sub>. The activation energy of oxidation was found to be 3600 kcal/mol.

Card 2/2

FROSKOURNINA, N. F.

"Sur les alcaloides de Salsola kichteri. III. Sur le salsoline, possedant une activite optique et sur l'elimination de deux alcaloides nouveaux." Proskournina, N. F., et Orekhow, A. P. (p. 1999)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii). 1937, Volume 7, No. 14.

PROSKOURNINA, N. F.

"Recherches dans le domaine du garmine et du garmaline. Communication II".

Konowalowa, R. A., <u>Proskournina, N. F.</u> et Orekhow, A. P. (p. 1256)

S0: <u>Journal of General Chemistry</u> (Zhurnal Obshchei Khimii) 1936, Vol. 6, No. 9

PROSKOV, S. M., MIKIREV, A. Ye.

"Berpencular Solar Streams with Force Free Magnetic Fields"

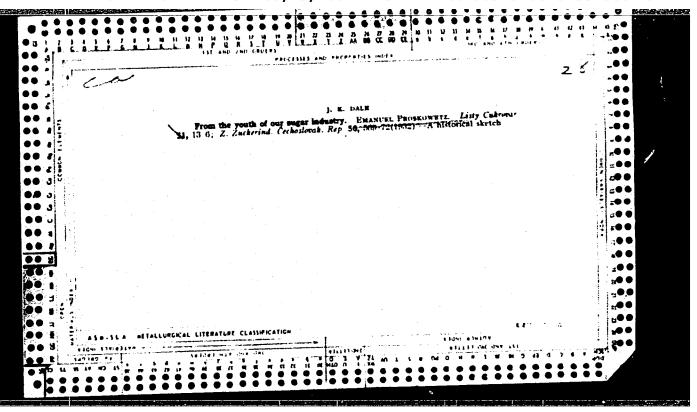
Soviet Papers Presented at Plenary Meetings of Committee on Space Research (COSPAR) and Third International Space Sumposium, Washington, D. C., 23 Apr - 9 May 62

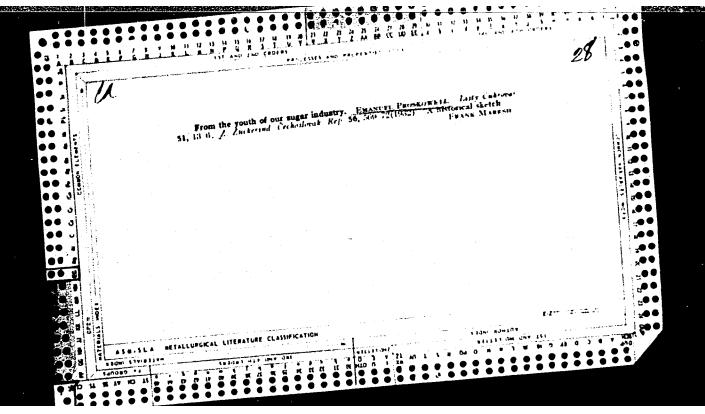
GOCHAKOV, B.G.; PROSKOVSKIY, A.M.; SHARMAGIY, Yu.V.; MAUER, A.A.

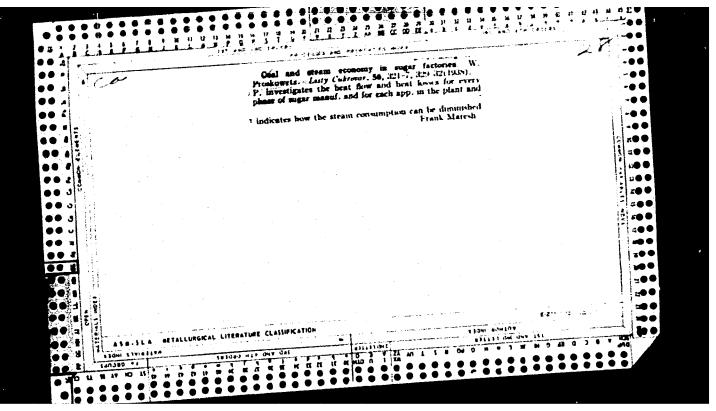
High-frequency wave trap filters with 50 to 330 kc. attenuation band. Energ. i elektrotekh. prom. no.1:20-22 '62. (MIRA 15:6)

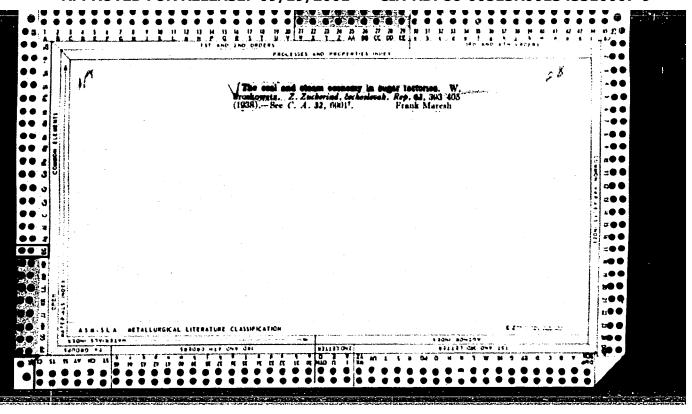
1. Krymenergo.

(Electric filters)
(Electric power distribution--Communication systems)

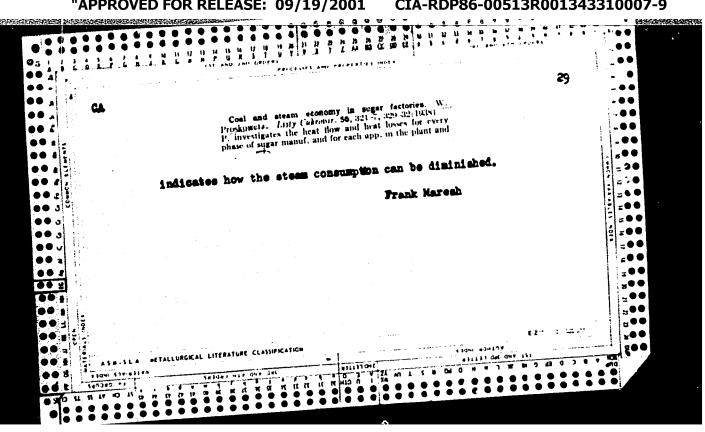








#### CIA-RDP86-00513R001343310007-9 "APPROVED FOR RELEASE: 09/19/2001



GOL DMAN, A.G.; PROSKURA, A.I.; LYSENKO, S.F.

Excitation spectra of the Gudden-Pohl effect in luminophors based on copper-activated zinc sulfide. Opt. i spektr. 18 no.5:894-896
My \*65. (MIRA 18:10)

L 64497-65 EMT(1)/EMT(m)/EMP(t)/EMP(b) IJP(c) JD

ACCESSION NR: AP5012623 UR/0051/65/018/005/0894/0896 50 535.373.1

AUTHORS: Gol'dman, A. G.; Proskura, A. I.; Lysenko, S. F.

TITIE: Excitation spectra of the Gudden-Pohl effect in copperactivated zinc-sulfide phosphors

SOURCE: Optika 1 spektroskopiya, v. 18, no. 5, 1965, 894-896

TOPIC TAGS: emission spectrum, zinc compound optic material, optic activity, phosphorescence, luminescence, photoconductivity

ABSTRACT: This is a continuation of earlier work (DAN SSSR v. 149, 1419, 1963 and v. 150, 519, 1963), in which the emission spectra of the compound optic material of the compound optic material.

and the Gudden-Pohl flash emission centers coincide in the same phosphor as long as there is not protective field to create special conditions for Gudden-Pohl centers. We thank N. N. Kalibabchuk for

SSOCIATION:	None						
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ACCESSION NR: AP3000743

s/0020/63/150/003/0519/0522

AUTHOR: Gol'dman, A. G.; Member Academy of Sciences USSR; Proskura, A. I.

56

TITLE: The Nature of the Gudden-Pohl effect

SOURCE: AN SSSR. Doklady, v. 150, no. 3, 1963, 519-522

TOPIC TAGS: luminors, external electric field, electrons

ABSTRACT: In order to check the theory of this effect suggested by D. Currie according to which the external field empties the traps formed previously by excitation, the authors have studied this effect with the luminor ZnS-Cu, Sn described previously by them (DAN, 149, 3, 1963). The excitation was with a PRK-Wquartz lamphusing UPhS-3dlight filter, the long-wavelength irradiation with a 40 w bulb. LRS-3 light filter. The flash was produced with a-c field, 50 hz. The authors conclude on the basis of the results obtained that the external electric field interacts with an interval protecting electric field produced by electrons trapped on the deep levels. The properly oriented external field partly removes the protecting electrons, and the excited centers recombine with free electrons producing the flash. Orig. art. has: 2 figures.

Association: Institute of Physics, Admy. of Sciences

Card 1/4)

GOL'DMAN, A.G., akademik; PROSKURA, A.I.

Determining the spectral composition of the Gudden-Pohl flash in sinc-sulfide luminophors. Dokl.AN SSSR 149 no.3:567-570 Mr \*63. (MIRA 16:4)

1. Institut fiziki AN UkrSSR. 2. AN UkrSSR (for Gol'dman). (Zinc sulfide—Spectra)

 GOL'DMAN, A.G. [Gol'dman, O.H.]; DUDNIK, V.P. [Dudnyk, V.P.]; PROSKURA, A.I. [Proskura, O.I.]

Frequency characteristics of the brightness of electroluminescent cells with zinc-sulfide powder electroluminophors.

Ukr.fiz.zhur. 6 no.6:761-764 N-D '61.

1. Institut fiziki AN UkrsSSR, Kiyev.

(Luminescent substances)

\$/020/63/149/003/011/028 B102/B186

AUTHORS:

Gol'dman, A. G., Academician AS UkrSSR, Proskura, A. I.

TITLE:

Determination of the spectral burst composition in the

Gudden-Pohl effect for luminophores with ZnS basis

PERIODICAL:

Akademiya nauk SSSR. Doklady, v. 149, no. 3, 1963,

567-570

TEXT: The authors measured the spectra of luminescence bursts arising owing to the Gudden-Pohl effect. The luminophor was excited by filtered light from a mercury lamp; an YM-2 (UM-2) monochromator (0.5 mm slit), a photomultiplier of type \$39-19 M(FEU-19M)(4.10-8 a dark current) and a galvanometer (0.41.10-9a/scale un.) were used for the measurements. Luminophors with high yield were prepared by boiling a mixture of 150 ml distilled water, 5 g special ZnS and 60 mg SnCl, for 15 min. After drying, the remaining powder was annealed (20 min, 800°C) in an open quartz ampule. The luminophor obtained was analyzed: 6·10-4g Sn and 7·10-5g Cu per g of ZnS. A layer (0.1 mm) of it was deposited between the electrodes (metal and SnO2-coated glass). The emission spectra have a peak at 525µ Card 1/2\_\_\_\_

Determination of the spectral ...

5/020/63/149/003/011/028 B102/B186

and almost Caussian shape. The spectrum of photoluminescence is somewhat shifted with respect to the light sum spectrum of the Gudden-Pohl effect toward the short-wave side (by  $0.532\mu$  at the peak, somewhat more at the short-wave side where it forms a tail). A comparison between the spectra of photoluminescence luminosity or the light sum of G-P effect and phosphorescence luminosity 30 sec after excitation also show a similar effect: the second spectrum is broader and, especially at low intensities, shifted to the blue side. There are 4 figures.

ASSOCIATION: Institut fiziki Akademii nauk JSSR (Institute of Physics

of the Academy of Sciences UkrSSR)

SUBMITTED:

November 3, 1962

Card. 2/2

ACC NR. AP6001649 SCHRCE CODE: UR/0051/65/019/006/0943/0950  AUTHOR: Gol'dman, A.G.; Proskura, A.I.; Lysenko, S.F.  ORG: none  TITLB: Three types of Gudden-Pohl effect and the phosphorescence of copperactivated zinc sulfide  SOURCE: Optika i spektroskopiya, v. 19, no. 6, 1965, 943-950  TOPIC TAGS: zinc sulfide, phosphorescence, luminescent center  ABSTRACT: The authors consider a characteristic property of the Gudden-Pohl effect (GPE) which consists in the conservation for an extended period of time in the solid dielectric of a certain portion of the absorbed light energy in the form of ionized luminescence centers and electrons, with their radiation recombination controlled by the electrical field. The mechanism of GPE center excitation is considered, and three types of GPB are described. The possible interaction of these types is amalyzed. The paper deals primarily with a study of the physical nature and laws of the 2nd and 3rd types of GPB, with particular attention given the derivation of the 3rd type and its control. The 2nd type is the effect arising as the result of the preliminary combined effect of shortwave radiation and the internal electric field; the 3rd type is the	L 11938-66 EWT(1)/EWT(m)/EWP(t)/EWP(b) IJP(c) JD	,
TITLB: Three types of Gudden-Pohl effect and the phosphorescence of copperactivated zinc sulfide  SOURCE: Optika i spektroskopiya, v. 19, no. 6, 1965, 943-950  TOPIC TAGS: zinc sulfide, phosphorescence, luminescent center  ABSTRACT: The authors consider a characteristic property of the Gudden-Pohl effect (GPE) which consists in the conservation for an extended period of time in the solid dielectric of a certain portion of the absorbed light energy in the form of ionized luminescence centers and electrons, with their radiation recombination controlled by the electrical field. The mechanism of GPE center excitation is considered, and three types of GPE are described. The possible interaction of these types is analyzed. The paper deals primarily with a study of the physical nature and laws of the 2nd and 3rd types of GPE, with particular attention given the derivation of the 3rd type and its control. The 2nd type is the effect arising as the result of the preliminary combined effect of shortwave radiation and the internal electric field; the 3rd type is the	ACC NR. AP6001649 SOURCE CODE: UR/0051/65/019/006/0945/0950	
SOURCE: Optika i spektroskopiya, v. 19, no. 6, 1965, 943-950  TOPIC TAGS: zinc sulfide, phosphorescence, luminescent center  ABSTRACT: The authors consider a characteristic property of the Gudden-Pohl effect (GPE) which consists in the conservation for an extended period of time in the solid dielectric of a certain portion of the absorbed light energy in the form of ionized luminescence centers and electrons, with their radiation recombination controlled by the electrical field. The mechanism of GPE center excitation is considered, and three types of GPE are described. The possible interaction of these types is analyzed. The paper deals primarily with a study of the physical nature and laws of the 2nd and 3rd types of GPE, with particular attention given the derivation of the 3rd type and its control. The 2nd type is the effect arising as the result of the preliminary combined effect of shortwave radiation and the internal electric field; the 3rd type is the	ORG: none	
ABSTRACT: The authors consider a characteristic property of the Gudden-Pohl effect (GPE) which consists in the conservation for an extended period of time in the solid dielectric of a certain portion of the absorbed light energy in the form of ionized luminescence centers and electrons, with their radiation recombination controlled by the electrical field. The mechanism of GPE center excitation is considered, and three types of GPE are described. The possible interaction of these types is analyzed. The paper deals primarily with a study of the physical nature and laws of the 2nd and 3rd types of GPE, with particular attention given the derivation of the 3rd type and its control. The 2nd type is the effect arising as the result of the preliminary combined effect of shortwave radiation and the internal electric field; the 3rd type is the	activated zinc sulfide	
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SHUBENKO-SHUBIN, Leonid Aleksandrovich; LISHTSKIY, Nikolay Longinovich; SHVARTS, Viktor Aleksandrovich; KORZH, Petr Ivanovich; PROSKURA, G.F., akademik, retsenzent [deceased]; YERSHOV, V.N., dotsent, kand.tekhn.nauk, retsenzent; SCRCKA, M.S., red.

[Atlas of drawings and diagrams of gas turbine units] Atlas konstruktsii i skhem gazoturbinnykh ustanovok. Pod obshchei red. L.A.Shibenko-Shibina. Moskva, Gos.nauchno-tekhn.isd-vo mashino-stroit.lit-ry, 1960. 183 p. (MIRA 14:1)

1. Chlen-korrespondent AN USSR (for Shubenko-Shubin). 2. AN USSR (for Proskura).

(Ges turbines--Design)

3ևկ31 S/185/61/006/006/008/030 D299/D304

24,3500 (1137,1138)

AUTHORS: Hol'dman, O.H., Dudnyk, V.P., and Proskura, O.I.

TITLE: On frequency characteristics of the brightness of electroluminescent cells with zinc-sulfide phosphors

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 6, no. 6, 1961, 761 - 763

TEXT: The frequency characteristic of an electroluminescent cell with a ZnS phosphor is mainly determined by its capacitance being almost linear (in case of a constant voltage), viz.  $i = 2\pi f V C$ . The frequency characteristic of the brightness B of a cell is approximately given by the formula B = af k, where a and k are constants  $(0 \le k \le 1)$ . If a resistor is connected in series with the cell, a maximum appears on the frequency characteristic at a frequency that is lower, the greater the ballast resistance; the brightness decreases fast with frequencies higher than that corresponding to maximum brightness. Insertion of a capacitance in parallel with the ballast resistor, leads to a certain linearization of the characteristic.

Card 1/2

On frequency characteristics of ...

\$/185/61/006/006/008/030 D299/D304

Thereby it is possible to regulate the capacitance (in a certain interval), so that the brightness becomes practically independent of the frequency. It is expedient to form a resonance circuit, by inserting an inductance. This has the following advantages: a) The voltage at the cell is increased (three- to tenfold) as compared to the source voltage; b) The brightness is greatly increased (a hundredfold); c) The current source is more efficiently used; d) The electroluminescence yield is higher. The frequency characteristics of electroluminescent elements reflect also the peculiarities of the electroluminescence mechanism. Thus, if dissimilar luminescent centers are present (ZnS-Cu, Mn), the frequency characteristics under similar electrical conditions, but in different spectral regions, have different exponents k. The frequency characteristics for the variable luminescence-component and for its constant component are in a different ratio, depending on the luminescence relaxation

ASSOCIATION: Instytut fizyky AS UkrRSR (Institute of Physics of the AS UkrSSR, Kyyiv) [Abstractor's note: Essentially com-

Card 2/2

GOL'DMAN, A.G., akademile, PROCKURA, A.I.

On the nature of Gudden-Pohl's effect. Dokl. AN SSSR 150 no.3:519-522 My '63. (MIRA 16:6)

1. Institut fiziki AN UkrSSR. 2. AN UkrSSR (for Gol'dman). (Phosphors-Spectra)

# Second number of the "Trudy" of the Geological Institute of the Tajik Academy of Sciences. Isv.Otd.est.nauk AH Tadsh.SSR no.2:113-115 '58. (MIRA 13:4)

 Tadshikskiy gosudarstvennyy universitet. (Tajikistan--Geology)

PROSKURA, G.F.	C, DEC	EASED 1959	1962,	<b>6</b>
	SEI	TIC .		
HYDRAULIC ENGIN	EER ING			
됐다. 중요, 목표, 자리미국 1	'많임용원이라면 그 가장점'	보이용되면 지금 내용하다		

MAKEYENKO, M.M.; PROSKURIN, I.G.; LEYDERMAN, G.I.; SOINTSEVA, Z.V.; NOVAK, V.A.; KARTELISHEV, V.T.; TSULIMOV, A., red.; POLEVAYA, Ye., tekhn.red.

[Moldavian Economic Administrative Region] Moldavskii ekonomicheskii administrativnyi raion. Kishinev, Gos.izd-vo "Kartia Moldoveniaske," 1961. 168 p. (MIRA 14:6) (Moldavia—Economic conditions)

PROSKURINA, Z.N.

Liquation of spheroidal graphite in magnesium cast iron. Dokl.

AN BSSR 4 no. 11: 466-468 N '60. (MIRA 13:12)

1. Fiziko-tekhnicheskiy institut AN BSSR. Predstavleno akademikom AN BSSR K.V. Gorevym.

(Graphite) (Cast iron)

PROSKURA, Georgiy Fedorovich; [Proskura, H.F.]; ROZOVSKIY, I.L.

[Rozovs'kyi, I.L.], kand, tekhm.nauk, otv.red.; SCKCEOVSKIY,
L.O. [Sokolovs'kyi, L.O.], red.izd-va; RAKHLINA, M.P.,
tekhn.red.

[Hydrodynamics of turbines] Gidrodynamika turbomashyn. Vyd.3.
perer. Kyiv, Vyd-vo Akad.nauk URSR, 1959. 578 p.

(MIRA 13:3)

(Turbines)

Generalized Sbor. trud.	characteristics of hydrau Lab. gidr. mash. no.7:3-1 (Hydraulic turbines)	lic-turbine runners. 5 158. (MIRA 12:9)	
	ŧ		

sov/124-58-5-5347

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 55 (USSR)

Proskura, G.F. AUTHOR:

The Theory of a Plane Cascade in a Finite Flow (Teoriya plo-TITLE:

skoy reshetki v ogranichennom potoke)

Sb. tr. Labor. problem bystrokhod. mashin i mekhanizmov PERIODICAL:

AN UkrSSR, 1955, Nr 5, pp 3-18

The author determines some of the characteristics of a stationary straight cascade containing a finite number of blades ABSTRACT:

by arbitrarily introducing for the cascade a nominal specific speed which is a function of the distance between the shroud plates. This specific speed is used in an empirical expression for the coefficient of cavitation for a hydraulic turbine. The analytical results, however, do not agree with the experimental data. The content of the article fails to correspond with its title, since the peculiarities of a flow past finite cascades are

not discussed.

G.Yu. Stepanov 2. Turbines--Theory 1. Turbines--Cavitation

Card 1/1

CIA-RDP86-00513R001343310007-9" APPROVED FOR RELEASE: 09/19/2001

## PROSKURA, GEORGIY, F.

PROSKIPA, GEORGIY FEDOROVICH.

Eksperimental'nain gidroaerodinamika. Chast'I. Moskva, Gosaviaavtoizdat,

1933. 308 p., illus., plates, diagrs.

bibliography: v. 1, p. 308. Title tr.: Experimental hydro-serodynamics. A course of the

Kharkov Institute of Aeronautical Studies. / Part I.

TL570.P75

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

IVANOV, N.V. (Kiyev, poselok Konchevatoye); KOSTIKO, I. (Vitebek); PROSKURA, I.F. (Kerch!)

Statements by workers in keramzit enterprises. Stroi. mat. 10 no.9:36-37 S 164 (MIRA 18:2)

1. Glavnyy inzh. Korchevatskogo zavodoupravleniya (°or Ivanov).
2. Nachal'nik konstruktorskogo byuro Vitebskogo konbinata
strcitel'nykh materialov (for Vitebsk). 3. Rukovoditel' laboratorii legkikh zapolniteley i strcitel'noy keramiki Krymskogo
filiala Gosudarstvennogo nauchno-iraledovatel'skogo instituta
stroitel'nykh materialov i izdeliy. (for Proskura).

PROSKURA, I.P., kand. seliskokhoz. nauk; BACHEVSKIY, S.A.

A valuable green fallow crop. Zemledelie 27 no.5:28-30 My 165. (MIRA 18:6)

1. Direktor opytnogo khozyaystva "Obroshino" Nauchno-issledovateli-skogo instituta zemledeliya i zhivotnovodstva zapadnykh rayonov UkrSSR (for Bachevskiy).

KIYAK, Grigoriy Stapanovich (Kyiak, H.S.); PROSKURA, Il'ya Pavlovich; YUKHIMCHUK, F.P. [IUkhiachuk, F.P.], kand. sel'khoz. nauk, YuKHIMCHENKO, Ya.V. [Lisovychenko, IA.V.], red.; POTOTSKAYA, L.A. [Potots'ka, L.A.], tekhn. red.

[Cultivation practices and production of forage lupine seed in western areas of the Ukraine] Agrotekhnika i nasinnytstvo kormovoho lalupynu v zakhdnýkh raionakh Ukrainy. Kyiv, Vydvo Ukrainskoi Akad. sel'skhosp. nauk, 1962. 75 p.

(Ukraine—Lupine)

(Ukraine—Seed production)

USSR/Cultivated Plants - Fodder.

: Ref Zhur - Biol., No 4, 1958, 15682 Abs Jour

Author

I.P. Proskura

Inst

Title

: The Effects of Fertilizers on the Slightly Alkaloid

Lupine Yield and Fodder Quality.

(Vliyaniye udobrenniy na urozhay i kormovyye kachestva

maloalkaloidnogo lupina).

Orig Pub

Zhivotnovodstvo, 1957, No 5, 65.

Abstract

: At the kolkhoz near the city of L'vov experiments were conducted for two years on the study of the effects of mineral fertilization on the grain yield of the slightly alkaloid Nosovskiy white-seeded lupine, on its albumin and alkaloid content. The mineral fertilizers were applied under the plow in 1955 and under a deep spring culturation in 1956 at the rate of 45 kilograms

of active substances per 1 hectare.

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USSR/Cultivated Plants - Fodder:

М.

Abs Jour : Ref Zhur - Biol., No 4: 1958, 15682

The grain harvest was: on plots without fertilizers 11 centners, on fertilized plots with  $K_k$  14.6, with kainite 14.4,  $P_c$  12.2,  $P_0$  12.3,  $K_k$  and  $P_c$  15.6 centners per 1 ha. Potash fertilizers raised the albumin of slightly alkaloid lupine and lowered its alkaloid content. To raise the yielding capacity and lower the alkaloid nature of the lupine it is recommended that those potassium and phosphorus,  $P_0$  and kainite fertilizers which are less scarce be applied under the plantings when cultivating on sandy loam soils.

Card 2/2

THE REAL PROPERTY.

USSR/Cultivated Plants. Fodder Plants.

M

Abs Jour : Ref Zhur-Biol:, No 15, 1958, 68231

Author

: Proskura, I. P.

Inst

Title

: Ukr SSR Western Rayon Scientific Research Institute of Agriculture and Animal Husbandry.

: The Effect of Basic Agricultural Measures upon

Yields of Fodder Lupine Seed.

Orig Pub : Inform. byul. Nauk.-dosl. in-t zemlerobstva

i tvarinnitstva zakhidn. rayoniv URSR, 1957,

No 2, 42-44

Abstract : A study was conducted of the influence of sowing dates, sowing norms, and fertilization on the yield and quality of seed of yellow fodder lupine (Nosovsk white-seed va-

riety) on weakly podsolized, sandy loan soils

Card : 1/2

USSR/Cultivated Plants. Fodder Plants.

И

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68231

(Bryukhovits Rayon, L'vov Oblast!). The best results were obtained when lupine was sown on early dates (not later than the first third of April), in narrow rows, and with a sowing norm of 160 kg/hectare. The maximum yield (141.8 percent of the control) was obtained by using potassium and phosphorous fertilizers together (45 kg/hectare of active material), since mineral fertilizers were very effective, especially potassium. It has been determined that potassium salt and kainite, and also superphosphate and phosphorite fertilizers have almost identical effects on lupine yields.

-- B. T. Konik

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